AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A buck/boost converter comprising:

an input and an output;

a switching cell with a switch between the input and the output;

a selector configured for selectively configuring the switching cell into at least two configurations from among the following:

a parallel chopper configuration or

a series chopper configuration or;

an inductive-storage chopper configuration;

wherein ~~the cell is capable of using a single one of~~ the switch is configured to chop a voltage of the input in the at least two configurations.

2. (currently amended) The converter according to claim 1 wherein the selector is configured to selectively configure[[s]] the switching cell from among the three configurations.

3. (original) The converter according to claim 1 wherein the switching cell comprises an inductor and diodes.

4. (original) The converter according to claim 2 wherein the switching cell comprises an inductor and diodes.

5. (previously presented) The converter according to claim 1 wherein the switch is a transistor.

6. (original) The converter according to claim 2 wherein the switch is a transistor.

7. (original) The converter according to claim 3 wherein the switch is a transistor.

8. (original) The converter according to claim 4 wherein the switch is a transistor.

9. (original) The converter according to claim 5 wherein the switch is a high-frequency transistor, for example, 30 kHz.

10. (previously presented) The converter according to claim 1 wherein the selector comprises a first transistor and a second transistor.

11. (previously presented) The converter according to claim 2 wherein the selector comprises a first transistor and a second transistor.

12. (previously presented) The converter according to claim 3 wherein the selector comprises a first transistor and a second transistor.

13. (previously presented) The converter according to claim 5 wherein the selector comprises a first transistor and a second transistor.

14. (previously presented) The converter according to claim 9 wherein the selector comprises a first transistor and a second transistor.

15. (original) The converter according to claim 10 wherein the selector comprises two transistors of a low-frequency, for example, 50 kHz.

16. (currently amended) The converter according to claim 10 wherein in response to the converter operating in the parallel chopper configuration, the transistors are both continuously conducting.

17. (currently amended) The converter according to claim 11 wherein in response to the converter operating in the parallel chopper configuration, the transistors are both continuously conducting.

18. (currently amended) The converter according to claim 12 wherein in response to the converter operating in the parallel chopper configuration, the transistors are both continuously conducting.

19. (currently amended) The converter according to claim 13 wherein in response to the converter operating in the parallel chopper configuration, the transistors are both continuously conducting.

20. (currently amended) The converter according to claim 14 wherein in response to the converter operating in the parallel chopper configuration, the transistors are both continuously conducting.

21. (currently amended) The converter according to claim 15 wherein in response to the converter operating in the parallel chopper configuration, the transistors are both continuously conducting.

22. (currently amended) The converter according to claim 10 wherein in response to the converter operating in the series chopper configuration, the transistors are both continuously non-conducting.

23. (currently amended) The converter according to claim 11 wherein in response to the converter operating in the series chopper configuration, the transistors are both continuously non-conducting.

24. (currently amended) The converter according to claim 12 wherein in response to the converter operating in the series chopper configuration, the transistors are both continuously non-conducting.

25. (currently amended) The converter according to claim 13 wherein in response to the converter operating in the series chopper configuration, the transistors are both continuously non-conducting.

26. (currently amended) The converter according to claim 14 wherein in response to the converter operating in the series chopper configuration, the transistors are both continuously non-conducting.

27. (currently amended) The converter according to claim 15 wherein in response to the converter operating in the series chopper configuration, the transistors are both continuously non-conducting.

28. (currently amended) The converter according to claim 10 wherein in response to the converter operating in the inductive-storage chopper configuration, the first transistor is continuously conducting and the second transistor is continuously non-conducting.

29. (currently amended) The converter according to claim 11 wherein in response to the converter operating in the inductive-storage chopper configuration, the first transistor is continuously conducting and the second transistor is continuously non-conducting.

30. (currently amended) The converter according to claim 12 wherein in response to the converter operating in the inductive-storage chopper configuration, the first transistor is continuously conducting and the second transistor is continuously non-conducting.

31. (currently amended) The converter according to claim 13 wherein in response to the converter operating in the inductive-storage chopper configuration, the first transistor is continuously conducting and the second transistor is continuously non-conducting.

32. (currently amended) The converter according to claim 14 wherein in response to the converter operating in the inductive-storage chopper configuration, the first transistor is continuously conducting and the second transistor is continuously non-conducting.

33. (currently amended) The converter according to claim 15 wherein in response to the converter operating in the inductive-storage chopper configuration, the first transistor is continuously conducting and the second transistor is continuously non-conducting.

34. (original) The converter according to claim 1 comprising a capacitor for filtering the voltage at the output.

35. (original) The converter according to claim 1 comprising a diode bridge at the input.

36. (currently amended) The converter according to claim 1 wherein the ~~switching cell has a single~~ switch ~~between the input and the output, and the cell is capable of using the same single switch~~ is configured to chop a voltage of the input in ~~all~~ each of the parallel chopper configuration, the series chopper configuration, and the inductive-storage chopper configuration ~~configurations~~.

37. (canceled)

38. (new) The converter according to claim 1, wherein:

in response to the selector configuring the switching cell into any one of the parallel chopper configuration, the series chopper configuration, or the inductive-storage chopper configuration, the switch is configured to periodically switch between on and off conditions.

39. (new) The converter according to claim 16, wherein:

in response to the selector configuring the switching cell into the parallel chopper configuration, the switch is configured to periodically switch between on and off conditions.

40. (new) The converter according to claim 22, wherein:

in response to the selector configuring the switching cell into the series chopper configuration, the switch is configured to periodically switch between on and off conditions.

41. (new) The converter according to claim 28, wherein:

in response to the selector configuring the switching cell into the inductive-storage

chopper configuration, the switch is configured to periodically switch between on and off conditions.

42. (new) A buck/boost converter comprising:

an input and an output;

a switching cell with a switch between the input and the output;

a selector configured for selectively configuring the switching cell into a parallel chopper configuration, a series chopper configuration, or an inductive-storage chopper configuration;

wherein the selector comprises a first means for switching and a second means for switching;

wherein in response to the converter operating in the parallel chopper configuration, the first and second means for switching are both continuously conducting;

wherein in response to the converter operating in the series chopper configuration, the first and second means for switching are both continuously non-conducting;

wherein in response to the converter operating in the inductive-storage chopper configuration, the first means for switching is continuously conducting and the second means for switching is continuously non-conducting; and

in response to the converter operating in any one of the parallel chopper configuration, the series chopper configuration, or the inductive-storage chopper configuration, the switch is configured to periodically switch between on and off conditions.

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